# FORM PTO-1449 U.S. Department of Commerce Patent and Trademark Office

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Applicants:

Jeffrey L. WrateCH CENTER 1600/2900

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## U. S. PATENT DOCUMENTS

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AW)	1.	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)  Abdollah, S., Macías-Silva, M., Tsukazaki, T., Hayashi, H., Attisano, L., and Wrana, J.L. (1997). TßRI phosphorylation of Smad2 on Ser 465 and 467 is required for					
* //		Smad2/Smad4	complex	formation and signaling. J.	Biol. Cher	n. <i>272</i> , 276	78-27685.
.	2. Attisano, L. and Wrana, J.L. (1998). Mads and Smads in TGFß signaling. Curr.						
		Op. Cell Biol.	<i>10</i> , 188-19	94.			
	3.	B. Meckelein et al., (1998), Mol. Brain Research, v. 55, pp. 181-197.					
an	4.			Cell., 2, 157-162.			

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# FORM PTO-1449 U.S. Department of Commerce Patent and Trademark Office LIST OF DOCUMENTS CITED BY APPLICANT (Use several sheets if necessary O P E SEP 3 0 2002)

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Filing Date
January 19, 2001

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pros	5.	Chen, Y., Bhushan, A., and Vale, W. (1997b). Smad8 mediates the signaling of the receptor serine kinase. Proc. Natl. Acad. Sci. USA 94, 12938-12943.					
•	6.	Chen, Y., Lebrun, JJ., and Vale, W. (1996). Regulation of transforming growth factors and activin-induced transcription by mammalian Mad proteins. Proc. Natl. Acad. Sci. USA 93, 12992-12997.					
	7.	Dennler, S., Itoh, S., Vivien, D., ten Dijke, P., Huet, S., and Gauthier, JM. (1998). Direct binding of Smad3 and Smad4 to critical TGFß-inducible elements in the promoter of human plasminogen activator inhibitor-type 1 gene. EMBO J. 17, 3091-3100.					
	8.	Dyson, S. and Gurdon, J.B. (1998). The Interpretation of Position in a Morphogen Gradient as Revealed by Occupancy of Activin Receptors. Cell 93, 557-568.					
<u> </u>	9.	E. Labbé et al., (1998), Molecular Cell, v. 2, pp. 109-120.					
	10.	EMBL Sequence Database Accession No. EMHUM2.AB002303, KIAA0305					
	11.	EMBL Sequence Database, Accession No. EMHUM1:AF130419					
•	12.	Faux, M. and Scott, J.D. (1996). Molecular glue: kinase anchoring and scaffold proteins. Cell 85, 9-12.					
	13.	Gaullier et al., (1998), Nature, <u>394</u> , 432-433.					
	14.	Heldin, CH., Miyazono, K., and ten Dijke, P. (1997). TGF-□ signaling from cell membrane to nucleus through SMAD proteins. Nature. 390, 465-471.					
	15.	Henis, Y.I., Moustakas, A., Lin, H.Y., and Lodish, H.F. (1994). The type II and III transforming growth factor-ß receptors form homo-oligomers. J. Cell Biol. 126, 139-154.					
	16.	Hoodless, P.A., Haerry, T., Abdollah, S., Stapleton, M., O'Connor, M.B., Attisand and Wrana, J.L. (1996). MADR1, a MAD-related protein that functions in BMP2 signaling pathways. Cell 85, 489-500.					
	17.	Kim, J., Johnson, K., Chen, H.J., Carroll, S., and Laughon, A. (1997). <i>Drosophila</i> Madbinds to DNA and directly mediates activation of <i>vestigial</i> by decapentaplegic. Nature 388, 304-308.					
	18.	Kretzschmar, M. and Massagué, J. (1998). SMADs: mediators and regulators of TGF-    signaling. Current Opinion in Genetics & Development 8, 103-111.					
HUY	19.	Kretzschmar, M., Liu, F., Hata, A., Doody, J., and Massagué, J. (1997). The TGF-ß family mediator Smad1 is phosphorylated directly and activated functionally by the BMP receptor kinase. Genes Dev. 11, 984-995.					

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DATE CONSIDERED

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Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

### Page 3 of 4 FORM PTO-1449 U.S. Department of Commerce Attorney Docket Number Serial No. Patent and Trademark Office 3477.91 09/744,167 RECEIVED LIST OF DOCUMENTS CITED BY APPLICANT SEP 3 0 2001 (Use several sheets if necessar Applicants: Jeffrey L. WranTECH CENTER 1600/2900 Filing Date Group January 19, 2001 20. Labbé, E., Silvestri, C., Hoodless, P.A., Wrana, J.L., and Attisano, L. (1998). Smad2 and Smad3 positively and negatively regulate TGF -dependent transcription through the forkhead DNA binding protein, FAST2. Molecular Cell in press. 21. Lagna, G., Hata, A., Hemmati-Brivanlou, A., and Massagué, J. (1996). Partnership between DPC4 and SMAD proteins in TGF-B signaling pathways. Nature 383, 832-836. 22. Liu, X., Sun, Y., Constantinescu, S.N., Karam, E., Weinberg, R.A., and Lodish, H.F. (1997b). Transforming growth factor □-induced phosphorylation of Smad3 is required for growth inhibition and transcriptional induction in epithelial cells. Proc. Natl. Acad. Sci. USA 94, 10669-10764. M. Kretzschmar et al., (1998), Current Opinion in Genetics & Development, v. 8, 23. pp. 103-111. 24. Macías-Silva, M., Abdollah, S., Hoodless, P.A., Pirone, R., Attisano, L., and Wrana, J.L. (1996). MADR2 is a substrate of the TGFB receptor and its phosphorylation is required for nuclear accumulation and signaling. Cell 87, 1215-1224. 25. Nagase et al., (1997), DNA Research, v. 4, pp. 141-150. 26. Nakao, A., Imamura, T., Souchelnytskyi, S., Kawabata, M., Ishisaki, A., Oeda, E., Tamaki, K., Hanai, J.-i., Heldin, C.-H., Miyazono, K., and ten Dijke, P. (1997a). TGFß receptor-mediated signaling through Smad2, Smad3 and Smad4. EMBO J. 16, 5353-5362. 27. Nakayama, T., Snyder, M.A., Grewal, S.S., Tsuneizumi, K., Tabata, T., and Christian, J.L. (1998). Xenopus Smad8 acts downstream of BMP-4 to modulate its activity during vertebrate embryonic patterning. Development 125, 857-867 28. Nishimura, R., Kato, Y., Chen, D., Harris, S.E., Mundy, G.R., and Yoneda, T. (1998). Smad5 and DPC4 are key molecules in mediating BMP-2-induced osteoblastic differentiation of the pluripotent mesenchymal precursor cell line C2C12. J. Biol. Chem. 273, 1872-1879. Patki et al., (1998), Nature, 394, 433-434. 29.

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Reddy, A.H. (1998), Nature Biotechnology, v. 16, pp. 247-252

pathway. Genes and Dev.

proteins. Science 278, 2075-2080.

Patterson, G., Koweek, A., Wong, A., Liu, Y., and Ruvkun, G. (1997). The DAF-3 Smad protein antagonizes TGF-B-related receptor signaling in the C. elegans dauer

Pawson, T. and Scott, J.D. (1997). Signaling through scaffold, anchoring and adaptor

# FORM PTO-1449 U.S. Department of Commerce Attorney Docket Number Serial No. Patent and Trademark Office 3477.91 09/744,167 RECEIVAD LIST OF DOCUMENTS CITED BY APPLICANT SEP 3 0 2001 (Use several sheets if necessary Applicants: Jeffrey L. Wrante CH CENTER 1600 2900 Filing Date Group January 19, 2001 33. Savage, C., Das, P., Finelli, A., Townsend, S., Sun, C., Baird, S., and Padgett, R.(1996). The C. elegans sma-2, sma-3 and sma-4 genes define a novel conserved MB family of TGF-B pathway components. Proc. Natl. Acad. Sci. USA 93, 790-794. 34. Sekelsky, J.J., Newfeld, S.J., Raftery, L.A., Chartoff, E.H., and Gelbart, W.M. (1995). Genetic characterization and cloning of Mothers against dpp, a gene required for decapentaplegic function in Drosophila melanogaster. Genetics 139, 1347-1358. Simonsen et al., (1998), Nature, 394, 494-495. 35. Souchelnytskyi, S., Tamaki, K., Engström, U., Wernstedt, C., ten Dijke, P., and 36. Heldin, C.-H. (1997). Phosphorylation of Ser<sup>465</sup> and Ser<sup>467</sup> in the C Terminus of Smad2 Mediates Interaction with Smad4 and Is Required for Transforming Growth Factor-□ Signaling. J. Biol. Chem. 272, 28107-28115. Stenmark et al., (1996), J. Biol. Chem., v. 271, pp. 24048-24054. 37. Tsukazaki, T., Chiang, T.A., Davison, A.F., Attisano, L., and Wrana, J.L. 38. (1998).SARA, a FYVE domain protein that recruits Smad2 to the TGF\$\beta\$ receptor. Cell, 95, 779-791. Wiedemann et al., (1998), Nature, 394, 426-427. 39. Yingling, J.M., Datto, M.B., Wong, C., Frederick, J.P., Liberati, N.T., and Wang, X.-F. 40. (1997). Tumour Suppressor Smad4 is a Transforming Growth Factor □-Inducible DNA Binding Protein. Mol. Cell. Biol. 17, 7019-7028. Zawel, L., Dai, J.L., Buckhaults, P., Zhou, S., Kinzler, K.W., Vogelstein, B., and Kern, 41. S.E. (1998). Human Smad3 and Smad4 are sequence-specific transcription activators. Mol. Cell 1, 611-617. 42. Zhang, Y., Musci, T., and Derynck, R. (1997). The tumor suppressor Smad4/DPC4 as $\mathcal{U}/\mathcal{Y}$ a central mediator of Smad function. Curr. Biol. 7, 270-276.

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